

Pollution From Surface Cleaning

**Flat work
Sidewalks
Plazas
Building exteriors
Parking areas
Drive-throughs**



Pollution From Surface Cleaning

It harms the environment . . .

In most parts of the San Francisco Bay Area, storm drains are pathways for pollution, traveling directly from streets, gutters, and other paved surfaces to local creeks or the Bay, Ocean or Delta. Wash water from surface cleaning activities often carries pollutants that can harm the numerous wildlife species that depend on healthy waterways for their survival.

. . . And it's against the law!

Allowing polluting substances into storm drains is prohibited in California. Both the person who discharges the pollutant or leaves it behind, and the owner of the property where the material is generated are liable.

This folder provides guidance for mobile cleaners to prevent pollution when cleaning flat surfaces such as sidewalks, plazas, building exteriors, parking areas, and drive-throughs.

This guidance is not specifically intended to be appropriate for other mobile cleaning jobs such as fleet washing and detailing, carpet cleaning, or cleaning of food-related equipment.

Where do these pollutants come from?

In general, three phases of the cleaning process can cause problems for the environment:

- **Using** harmful cleaning chemicals—including soaps as well as solvents
- **Removing** toxic materials such as oil, antifreeze, and grease from parking lots, sidewalks, or other surfaces
- **Generating** polluted wash water from activities such as wet sand blasting of buildings to remove paint

What sorts of hazardous waste can surface cleaning generate?

- Oil-saturated absorbents (but not oil-saturated rags, which can be cleaned at an industrial laundry)
- Wash water that contains lead paint chips
- Solvent cleaners

Tips on proper cleaning and disposal methods

Avoid using soap!

- Even biodegradable soap is harmful to the environment. Before you use soap, test to see whether hot water under pressure will do the job.

Dry cleanup methods

- In many cases you can eliminate the need to collect and/or divert wash water if you follow this two-step process:
 1. Use absorbents (such as rags, absorbent mats or pads, rice hull ash, cat litter, vermiculite, or sand) to pick up greasy or oily spills.
 2. Sweep or vacuum to pick up litter, debris, or saturated absorbents
- Waste materials from dry cleanup such as absorbents, paint chips, etc. may often be disposed of in the trash. Check with the local solid waste authority to be sure. Rags may be sent to an industrial laundry.

Screening wash water

- When cleaning surfaces such as buildings and decks without loose paint, sidewalks, or plazas *without soap*, thorough dry cleanup should be sufficient to protect storm drains. However if any debris could enter storm drains or remain in the gutter or street after cleaning, wash water should first pass through a “20 mesh” or finer screen to catch the material, which should be disposed of in the trash.

Collecting wash water

- A simple and acceptable method for collecting wash water on private property requires only a drain plug, small sump pump, and a length of hose. If a small parking-lot-type catch basin is available, remove the grate, plug the drain pipe (usually 2, 3, or 4 inches in diameter), and place the pump in the catch basin, attached to a garden hose. As wash water drains to this lowest spot, pump to landscaping, a sewer line cleanout, or a container for later disposal to the sewer.
- Vacuum booms are another option for capturing and collecting wash water.

Directing wash water to landscaping

- When routing wash water to landscaping, check the slope and area to be sure to avoid runoff into a street or gutter. If the soil is very dry, wet it down thoroughly before discharging so that wash water will soak into the soil instead of running off to the street, gutter, or storm drain.

Blocking storm drains or containing wash water

- Sand bags can be used to create a barrier around storm drains.
- Plugs or rubber mats can be used to seal storm drain openings.
- You can also use vacuum booms, containment pads, or temporary berms to keep wash water away from the street, gutter, or storm drain.

Hazardous waste disposal

- Be sure to read cleaning product labels before disposing of wash water. Follow use and disposal instructions carefully.
- Check with the city or county environmental health department to find out how small businesses can dispose of hazardous waste at a drop-off event (instead of hiring a hazardous waste hauler). In general, you must generate less than 27 gallons or 220 pounds of a particular type of waste each month to qualify to use these “Conditionally Exempt Small Quantity Generator” (CESQG) programs.

Equipment and supplies

- Special materials such as sheets of absorbent, storm drain plugs and seals, small sump pumps, and vacuum booms are available from many vendors. For more information check catalogs such as:

Pigalog 1-800-468-4647
www.newpig.com

Lab Safety Supply 1-800-356-0783
www.labsafety.com

C&H 1-800-558-9966
www.chdist.com

W.W. Grainger 1-408-433-9889
www.grainger.com

- For other vendors and additional information, call or visit:

Cleaning Equipment Trade Assoc. 1-800-433-9889
www.ceta.org
Power Washers of North America 1-202-393-7044
www.pwna.org

So Where Should Wash Water Go?



Onto landscaping or unpaved surface

Wash water from cleaning unpainted building exteriors, sidewalks, or plazas, if:

- Discharge does not contain hazardous waste

AND

- Discharge will not cause flooding or nuisance problems, or flow to a creek

AND

- You have the owner's permission



Down a sink, toilet, or cleanout — through the sewer to a

wastewater treatment plant

Wash water from surface cleaning of painted building exteriors, sidewalks, plazas, parking areas, drive-throughs, food service facility dumpster/grease containment areas, etc., if:

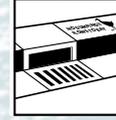
- You have used dry cleanup methods before washing with or without soap

AND

- Discharge does not contain hazardous waste

AND

- (For parking lots, traffic areas, food service facility dumpster/grease containment areas) You or the property owner have checked the local wastewater treatment plant's requirements before discharging to the sewer



To the street or storm drain

Wash water from cleaning sidewalks, plazas, and building exteriors, if:

- You have *successfully* used dry cleanup methods (described in the "tips" section of this folder to remove fresh oil stains, debris, and similar pollutants—before using water

AND

- Cleaning is done with water only—no soap or other cleaning chemicals

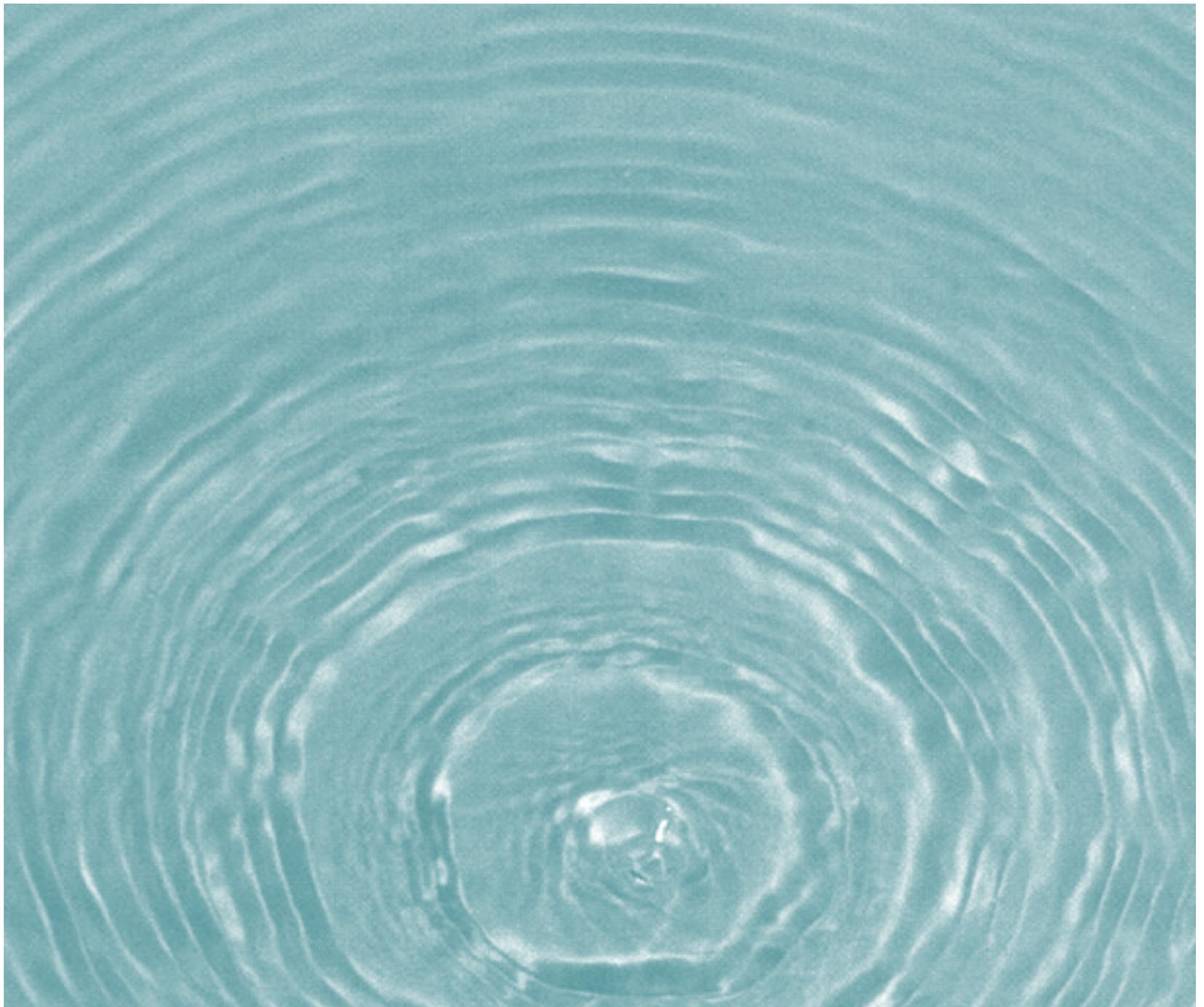
AND

- Water has not removed paint

Cleaning and Disposal

Type of Surface	Cleaning Method	Proper Disposal
Sidewalks, plazas	Dry cleanup* first, wash without soap	Screen wash water,* if needed, to catch debris THEN Discharge to landscaping,* or to a gutter, street, or storm drain
Sidewalks, plazas	Block the storm drain or contain runoff* Dry cleanup,* the wash with soap*	Discharge to landscaping* OR Collect water and pump to the sewer*
Parking areas, driveways, drive-throughs	1. Block the storm drain or contain runoff* 2. Use absorbents to pick up oil; then dry sweep 3. Clean with or without soap	Collect water and pump to the sewer* <i>Check the local wastewater authority's requirements for discharge</i>
Restaurant/food handling dumpster areas, grease storage	Block the storm drain or contain runoff*	If you must use water after sweeping/using absorbents, collect water and pump to the sewer* <i>Check the local wastewater authority's requirements for discharge</i>
Building surfaces, decks, etc., without loose paint	Dry cleanup Use high-pressure water, no soap	Screen wash water,* if needed, to catch debris THEN Discharge to landscaping,* or to a gutter, street, or storm drain
Unpainted building surfaces, wood decks, etc.	Block the storm drain or contain runoff* Use soap or acid wash to remove deposits, wood restorer, or other chemicals	Make sure pH is between 6 and 10 THEN Discharge to landscaping* OR Collect wash water in a tank* and pump to the sewer <i>Check the local wastewater authority's requirements for discharge</i>
Painted surfaces being cleaned to remove paint or graffiti	Block the storm drain or contain runoff* Use any cleaning method	Collect wash water in a tank and pump to the sewer, or dispose as hazardous waste, as appropriate* <i>Call the local wastewater authority or the state Department of Toxic Substances Control (510-540-3732) for help in determining whether the paint contains toxic pollutants such as lead, mercury, or tri-butyl tin; or if the solvent cleaners you use are hazardous</i>
Graffiti removal	Block the storm drain or contain runoff* Wet sand-blast	Direct all runoff to a landscaped or unpaved area* OR Follow instructions above for painted surfaces

* See tips section for ideas on how to do this!



**The Bay Area Stormwater Management Agencies Association and the Regional Water Quality Control Board gratefully acknowledge the contributions to this effort of the Santa Clara Valley Nonpoint Source Pollution Control Program, the Alameda Countywide Clean Water Program, and the Cleaning Equipment Trade Association.
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